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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,534	06/28/2002	Thierry Romanet	02058	9256

23338 7590 09/30/2003

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EXAMINER

POLITZER, JAY L

ART UNIT	PAPER NUMBER
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2856

DATE MAILED: 09/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/088,534

Applicant(s)

ROMANET ET AL.

Examiner

Jay L Politzer

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

Serial Number: 10/088,534

Art Unit: 2856

Title: METHOD AND APPARATUS USING HEAT FLUX TO DETECT OR  
MEASURE A DEPOSIT LIABLE TO FORM IN A FLUID-  
TRANSPORT PIPE

Filed: 6/28/02

Inventor(s): Romanet et al

### ***DETAILED ACTION***

#### **REJECTIONS OVER PRIOR ART UNDER 35 U.S.C. § 102:**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

"A person shall be entitled to a patent unless --

the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States."

2. Claims 1, 3-9, and 11 are rejected under 35 U.S.C. § 102(b) as being anticipated by Hausler.

Regarding Claims 1 and 8; a thermal gradient at 2, is formed by heating coil 11 to create the active zone 3. Heat flux is measured by thermocouples 14, 15, 20 and others at Col 4, Li 12-17. Processing and control means are depicted in Fig 3.

Regarding Claims 3-4, 6 and 11; see Col 3, Li 38-41.

Regarding Claim 5; see Col 4, Li 12-17.

Regarding Claim 7 and 9; see Col 1, Li 60 bridging Col 2, Li 23.

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REJECTIONS OVER PRIOR ART UNDER 35 U.S.C. § 103:

3. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

"A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person."

4. Claims 2 and 10 are rejected under 35 U.S.C. § 103 as being unpatentable over Hausler as applied to claims 1 and 8, above, in view of Ludington et al, hereinafter Ludington.

Regarding Claim 2 and 10; Hausler fails to cycle the heat source. Ludington teaches the value of cycling the heat source at Col 20, Li 63 bridging Col 21, Li 27 wherein the heat capacitance is obtained from the amplitude (peak). It would have been obvious to one of ordinary skill in the art at the time of the invention to cycle the heat source because Ludington teaches that more information is in a cycled source.

5. Claim 12 is rejected under 35 U.S.C. § 103 as being unpatentable over Hausler as applied to claim 8, above, in view of Ivanets et al, hereinafter Ivanets.

Regarding Claim 12; Hausler fails to use a band for the measurement sensors. Ivanets in the sole figure uses a band for the measurement sensors. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a band for the measurement sensors to avoid penetrating the pipe.

**FINAL ACTION:**

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

**REMARKS:**

7. Applicant's arguments filed 8/26/03 have been fully considered but they are not persuasive.

Applicant argues that Hausler's thermocouple 15 is positioned in the liquid flow. Fig 1 clearly shows this is not the case. Thermocouple 20 is in the liquid flow but is only used to compensate for the temperature of the liquid.

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Applicant argues that Hausler's metal piece is exposed to the liquid. So is the rest of the pipe.

Applicant argues that Hausler's thermocouples are not longitudinally displaced from each other. Fig 1 clearly shows that thermocouples 14 and 15 are longitudinally displaced.

Applicant argues that Ludington is not applicable. This argument is not understood. Both Hausler and Ludington are in the same class and both involve heat transfer. Ludington shows the value of cycling the heat source to obtain more information. /

Applicant argues that Ivanets is not applicable. Ivanets is relied upon only to add a flexible band. The fact that Ivanets does not measure in the same way as Hausler is not relevant.

#### INQUIRIES:


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Jay L. Politzer whose telephone number is (703) 305-4930 and whose facsimile number is (703) 308-7382
9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Hezron E. Williams, can be reached at (703) 305-4705.
10. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4900.

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jlp 9/8/03

72P

  
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